# LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT (SWCD)

offers FREE conservation education programs to schools, clubs and organizations in lake county. We offer hands on, interactive programs for Pre-K through Grade 12.

The programs listed in this brochure can be tailored to a particular topic or curriculum of your school district. All programs are designed to meet the Ohio Academic Science Content Standards. They are one hour in length, but accommodations can be made to fit your classes' schedule. There is no limit to how many times we will visit a classroom each year.

# CONTACT

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# WHAT TEACHERS AND STUDENTS ARE SAYING...

"The class all agreed that the trip to Helen Hazen last spring was their favorite field trip ever! Woo Hoo!"

> "...the kids really do enjoy the hands on labs!"

"Thanks to you and your awesome team! Despite the weather, the kids had fun and learned a lot--even many of the ones who hovered in the background. I am considering the possibility of bringing my honors biology students in the spring."

> "We had such a great time with the streamulator this week!"

"Thanks for teaching us about the Grand River it was very interesting."





# CONSERVATION EDUCATION FOR YOUR SCHOOL!

2016-2017 SCHOOL PROGRAMS CATALOG



# CLASSROOM PROGRAMS

## WEB OF LIFE

Younger students will learn to separate real animals and plants from imaginary ones, older students will also identify which are native to Ohio. We will then use an activity to explore how the native animals and plants are interdependent. Requires: a space where the entire class can comfortably sit in a circle. Recommended grade levels: K, lst, 2nd, 3rd and 5th grades.

# FRED THE FISH

Young students will go on a trip down the river with Fred and see what happens to his water as he passed through various landscapes. Students will learn about different causes of water pollution and also what can be done to keep water clean. Requires: a place where the entire class can sit and see a fish tank. Recommended grade levels: Pre-K through lst

## INCREDIBLE JOURNEY

We will explore the complexity of the water cycle and move away from the simple circle model by learning about the different pathways water follows. Requires: a fairly open classroom, or a gym or multi-purpose room where we can put up 9 stations, students will need pencils and the ability to read easy words. Accommodations can be made for younger students. *Also available as a kit for lend.* Recommended grade levels: lst, 2nd & 3rd

#### SOIL SLEUTHS

Students will have a hands-on experience with different soil types while exploring soil particles, profiles and soil history in the United States. This program requires a tolerance of dusty desks and muddy hands! Recommended grade levels: 3rd and 6th grades.

# KITS AND EQUIPMENT FOR LEND GREAT LAKES TIMELINE KIT

#### DRINKING WATER AND WASTEWATER TREATMENT ENVIROSCAPE

This model demonstrates the processes that water travels through as it's cleaned for drinking, used in houses and sent to the wastewater treatment plant. Requires: a table that all the students can gather around. Recommended grade levels: 2nd, 3rd & 7th grades, and Environmental Science

#### STREAMULATOR

A table model helps students to understand some of the concepts involving moving water. The model can demonstrate stream formation, bank erosion, velocity, flow rates and urbanization and landforms. Requires: Electricity, a place to fill a 5-gallon bucket and a space where all the students can gather around the model (no wood gym floors). Recommended Grade Levels: 4th, 6th & 7th

## NONPOINT SOURCE POLLUTION ENVIROSCAPE

This model demonstrates nonpoint source pollution and its impact on rivers and lakes. Students will learn the major causes of water pollution and discuss practices for preventing NPS pollution. Requires: a table that all the students can gather around. Recommended grade levels: 3rd, 4th & 7th grades and Environmental Science

## BENTHIC BUG BOXES

These kits provide everything your class needs to become experts in stream ecosystems. It includes information, preserved specimens, and activities. A great introduction or alternative to stream monitoring. Requires: basic classroom setup. Recommended grade levels: 5th & 7th grades, Biology & Environmental Science

This kit has ties to resource use, patterns of settlement and the history of the environmental movement. This kit contains a laminated navigational chart of the Great Lakes to be used with a 5-tier timeline, and a canvas floor map that the students can walk on and use to identify countries, states, provinces, major ports, rivers, and shipping routes. Other materials include a diagram of a lake freighter, and many books, VHS tapes and DVDs about the Great Lakes and shipping. Recommended grade levels: 4th & 8th grade

## GROUND WATER MODEL

This model allows students a window to see into various types of aquifers. Dyes demonstrate how groundwater pollution occurs. Requires: electricity, a table or counter that all the students can see and a place to fill a 5-gallon bucket. Recommended grade levels: 6th grade

# FOREST FIRE PREVENTION KIT

This is a collection of materials and literature about the impact of wildfires. Students can set up 'matchstick forests' to demonstrate different forestry practices and their effects on how wildfires burn. Recommended grade levels: 5th & 7th grades and Environmental Science

## SOIL EXPLORATION KIT

A great option for going beyond the Soil Sleuths program. This kit includes a Berlese funnel for catching soil macroinvertebrates, settling tubes and a kit for more accurately measuring particle size percentages on soils. Lesson plans and a reference book are also included. Recommended grade levels: 3rd & 6th grade

#### MAPS AND MAPPING

Our office is able to make large custom maps of areas within Lake county for your lessons. Please give us a call to set up a day and time to discuss the specifics of your custom map. Recommended grade levels: 3rd, 4th, 7th, World Geography and Environmental Science

# OUTDOOR FIELD PROGRAM

#### WATERSHED WATCH

Stream monitoring is an excellent way to understand real life ecosystems and collect real scientific data. Every May through September, Lake County classes and residents take to the streams with kick seines in hand. With the help of Lake SWCD staff, they collect and identify macroinvertebrates and use their findings to determine water quality. Since 1994 this program has collected data for Ohio DNR's Scenic Rivers program. Requires: transportation to river site.

Recommended grade levels: 5th and up

